Patent Claims

1. Method for cleaning a bio-polymer, which exists in the form of porous granules after extensive removal of the organic solvent used for extraction from the biomass by means of a steam distillation process,

   characterized in that

   the granules with a content of less than 25% by weight of organic solvent are treated at least once with an organic cleaning solution that cannot be randomly mixed with water such that through the displacement of the aqueous phase by means of the cleaning solution the water-soluble contaminants and by means of elution of the contaminants in the cleaning solution that are soluble in the organic solvent, a depletion of the contaminants in the granules is affected, wherein subsequently the aqueous phase is separated and the cleaned granules are separated from the cleaning solution.

2. Method according to claim 1, characterized in that the granules with a content of less than 10% by weight of an organic solvent are treated at least once with the organic cleaning solution.

3. Method according to claims 1 and 2, characterized in that preferably inherently stable granules are treated.

4. Method according to one of claims 1 through 3, characterized in that the organic solvent used for extraction is isoamyl alcohol.

5. Method according to one of claims 1 through 4, characterized in that the bio-polymer consists preferably of polyhydroxyalkanoates, and in that these are preferably polyhydroxy-β-butyric acid as well as their co-polymers with other polyhydroxyalkanoates.

6. Method according to one of claims 1 through 5, characterized in that an organic solvent without any or with poor solubility properties is used as the cleaning solution for the biopolymer.

7. Method according to one of claims 1 through 6, characterized in that isoamyl alcohol or another organic solvent that can likewise not be randomly mixed with water is used as the cleaning solution.

8. Method according to one of claims 1 through 7, characterized in that isoamyl alcohol or ethyl acetate are used as the cleaning solution.

9. Method according to one of claims 1 through 8, characterized in that the cleaning solution is saturated with water.

10. Method according to one of claims 1 through 9, characterized in that additional water is introduced into the process.

11. Method according to one of claims 1 through 10, characterized in that the separation of the cleaning solution that is loaded with the contaminants occurs by means of gravity precipitation or through suitable filters, centrifuges and/or similar dehydration units.

12. Method according to one of claims 1 through 11, characterized in that, for the purpose of multiple cleaning, the cleaned granules are mixed again with an organic cleaning solution after the respective separation of the cleaning solution that is loaded with the contaminants and are cleaned again.

13. Method according to one of claims 1 through 11, characterized in that, during multiple cleaning, the granules and the cleaning solution are directed in a counter-current.

14. Method according to one of claims 1 through 11 and according to claim 13, characterized in that this counter-current cleaning of the granules is conducted in a washing tower.

15. Method according to one of claims 1 through 14, characterized in that the aqueous solution that was precipitated at the beginning from the granules is separated before execution of the subsequent cleaning steps.